

STUDIES AND SPECIAL PROGRAMS**Policy Studies**[Review of Electronically Controlled Pneumatic \(ECP\) Brakes](#)[Domestic Transportation of Petroleum, Natural Gas, and Ethanol](#)[Performance-Based Safety Regulation](#)[Review of the Compliance, Safety, Accountability Program of the Federal Motor Carrier Safety Administration](#)[Air Traffic Control: Symposium on Organizational Reform Options](#)[Evaluation of the Federal Railroad Administration R&D Program](#)[Future Interstate](#)[Inland Waterways](#)[Innovative Urban Mobility Services: Issues and Opportunities](#)[In-Service Performance of Energy-absorbing W-beam Guardrail End Treatments: Phase 1](#)[Intercity Passenger Travel: Opportunities and Issues in Short-haul Markets](#)[Long Term Bridge Performance Committee LTBP](#)[Long Term Pavement Performance LTPP](#)[Offshore Oil and Gas Industry Safety Culture](#)[Polar Icebreaker Cost Assessment](#)[Propane Gas Pipeline Facilities](#)[Railroad Transportation Regulation](#)[Real Time Monitoring of Offshore Oil and Gas Operations](#)[Research and Technology Coordinating Committee \(Federal Highway Administration\)](#)[Review of USDOT Report on Connected Vehicle Initiative Communications Systems Deployment](#)[Review of USDOT Truck Size and Weight Study](#)[Strengthening the FMCSA R&T Program](#)[Syntheses, Overview](#)[IDEA Programs](#)[Policy Studies](#) > UA StudyText Size: **A⁺** | Share:

Electronic Vehicle Controls and Unintended Acceleration Study

Resource Center

Scope

The U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) has requested that the National Research Council (NRC) appoint an independent committee with appropriate expertise to review past and ongoing industry and NHTSA analysis and research to identify possible causes of unintended acceleration and make recommendations on (a) NHTSA research, rulemaking, and defects investigation activities and (b) human, infrastructure, and financial resources required for NHTSA to assure the future safety of electronic throttle control and other electronic vehicle control functions.

The project is being undertaken by the NRC's [Transportation Research Board](#) (TRB) and [Division on Engineering and Physical Sciences](#) Board on Energy and Environmental Systems and Computer Science and Telecommunications Board. The project's full scope and a link to the committee's membership, including short biographies, are available as part of the [NRC's Current Projects System](#).

Timeline

A prepublication manuscript of the final report is expected to be available in June 2011, with a published report to follow later.

Note: The final report, initially due in June 2011, will not be completed until later in the fall.

Mailing List

Members of the media wishing to receive updates on this project should contact [Maureen O'Leary](#) of the National Academies' Office of News and Public Information. Members of the public who would like to receive updates on milestones related to the project as well as a notice on the release of the committee's report should [subscribe to TRB's weekly electronic newsletter](#).

Public Comment

If you have information you would like to share with the committee, you can do so by submitting your comment using the [public comment submission online form](#). All comments you submit to the committee, including your name and identifying information, will be made available to the public through the public access file for the project. The National Academies shall be authorized to use any such comments or submissions in accordance with the National Academies' Terms of Use Statement.

Committee Updates

Posted 06/05/2012

The final report has been released. For more information, please click [here](#)

Posted 06/13/2011 - June 12-14 Committee Meeting

June 13, 2011 - Speaker Presentation

Sean Kane, ["Toyota Unintended Acceleration: Learning From Crises and Moving Forward."](#)

Posted 03/18/2011 - March 3-4 Committee Meeting

March 3, 2011 - Speaker Presentation

- Mike Kirsch, Principal Engineer and NASA Study Lead, ["NASA Engineering and Safety Center Study of Unintended Acceleration in Toyota Vehicles."](#)

March 4, 2011 - Speaker Presentation

- Dr. Brian Murray, United Technologies Research Center, ["Software Safety Assurance Processes and Challenges in the Automotive and Aviation Industries."](#)

Posted 02/01/2011 January 27-28 Committee Meeting

January 27, 2011 - Speaker Presentations

- Ronald A. Belt, Discussion of Toyota's ETCS-i Electronic Throttle Control System: ["Toyota's ETCS-i System and Latch-up as a Cause of SUA"](#)
- John Maddox, Associate Administrator, Vehicle Safety Research, Research Capabilities, Program Prioritization, and Resources: ["National Highway Traffic Safety Administration - Research Overview"](#)
- Dan Smith, Senior Associate Administrator, Vehicle Safety Rulemaking process & authority: ["NHTSA Rulemaking Process"](#)
- Nathaniel Beuse, Director, Office of Crash Avoidance Standards, Rulemaking, Rulemaking Case Study: ["Performance Standard Development - Ejection Mitigation"](#)
- Dan Smith, Senior Associate Administrator, NHTSA Vehicle Safety Organization & Staffing: ["NVS Organizational Chart"](#)

January 28, 2011 - Speaker Presentation

- David Champion, Director Auto Test Center, Consumers Union: ["Consumer Reports"](#)

Posted 01/12/2011

December 7, 2010 - Information provided to the committee by the National Highway Traffic Safety Administration (NHTSA) about various NHTSA offices

- [Intro - Office of Vehicle Safety](#)
- [Office of Data Acquisitions](#)
- [Office of Defects Investigation](#)
- [Office of Regulatory Analysis and Evaluation](#)
- [Office of Rulemaking](#)
- [Office of Traffic Records and Analysis](#)
- [Office of Vehicle Safety Research](#)

Posted 12/15/2010 - November 15-16 Committee Meeting

November 15, 2010 - Speaker Presentations

- Tom Gross, Dep. Director, Post-market Science, Office of Surveillance and Biometrics Center for Devices and Radiological Health, U.S. Food and Drug Administration (FDA): ["Postmarket Safety Surveillance: A Medical Perspective"](#)
- Bill DuMouchel, Chief Statistical Scientist, Oracle Health Sciences: ["Data Mining of Report Databases: Adverse Drug Reactions vs. Automobile Safety Defects"](#)
- Jeff Silberberg, Senior Electronics Engineer, FDA Center for Devices and Radiological Health: ["FDA/CDRH Experience with EMC Problem Reports, Standards, and Guidance"](#)
- Daniel J. Dummer, Engineering Director, Reliability Test, Medtronic CRDM: ["Medtronic and Medical Device Industry - Mitigating Electromagnetic Interaction"](#)



November 16, 2010 - Speaker Presentations

- David Walen, Chief Scientific and Technical Advisor—EMI and Lightning, FAA Aviation Safety: "[Civil Aircraft System Safety and Electromagnetic Compatibility](#)"
- Tom Fancy, Technical Fellow, Gulfstream Aerospace Corporation: "[Aircraft Electronics: Safety Assurance in Product Design/Development/Certification and Methods for Monitoring and Evaluating Safety Performance Aircraft Electronics](#)"
- Michael D. James, FAA DER Engine Control Systems, Honeywell Aerospace: "[Aircraft Electronics: Safety Assurance in Product Design/Development/Certification and Methods for Monitoring and Evaluating Safety Performance Engine Control Systems Perspective](#)"
- Margaret Jenny, President, RTCA, Inc.: "[RTCA Role in Developing Minimum Aviation Performance Standards](#)"
- Joseph D. Miller, Chief Engineer Systems Safety, TRW Automotive Member ISO TC22 SC3, Working Group 16: "[National Academy of Sciences Briefing on ISO 26262](#)"
- Thomas M. Kowalick, Chair, IEEE global standards for MVEDRs: "[Motor Vehicle 'EDR' Global Standardization and Related Issues](#)"

Posted 10/11/2010 - October 11-12 Committee Meeting**October 11, 2010** - Speakers' Presentations

- Paul Fischbeck, Professor, Engineering and Public Policy and Social and Decision Sciences, Carnegie Mellon University - "[Driving Safety Risks and Unintended Acceleration](#)"
- Randy Whitfield, Director, Quality Control Systems Corporation - "[What NHTSA's Data Can tell Us about Unintended Acceleration and Electronic Throttle Control Systems](#)"
- [Photos from the meeting](#)

October 12, 2010 - Speakers' Presentations and Photos

- Chip Chidester, Director, Office of data Acquisitions, NHTSA - "[Overview of NCSA's and NVS Research data Collection Systems](#)"
- Richard Boyd, Acting Director, Office of Defects Investigation, NHTSA; Christina Morgan, Early Warning Division Chief, Office of Defects Investigation, NHTSA; Gregory E. Magno, Vehicle Control Division Chief, Office of Defects Investigation, NHTSA; Jeffrey L. Quandt, Vehicle Control Division Chief, Office of Defects Investigation, NHTSA - "[Early Warning Reporting Data, VOOs, Artemis, and Information Request Letter \(IRL\) Information](#)"
- Clarence Dittlow, Executive Director, Center for Auto Safety - "[Statement to Committee on Vehicle Electronic Controls and Sudden Unintended Acceleration](#)"
- William Rosenbluth, Automotive Systems Analysis - "[NHTSA 58 SUA Cases Report ASA Preliminary Analysis](#)"
- [Statements](#) by individuals who have experienced unintended acceleration
 - Dr. Eugene V. Mielaczarek
 - Ms. Rhonda Smith
 - Mr. Bob Tevis
 - Mr. Richard Zappa
 - Mr. Bulent Ezal
 - Ms. Lilia Alberto
 - Ms. Helen Behrens
 - [Mr. Kevin Haggerty](#)

Posted 10/03/2010 - October 11-12 Committee Meeting, Washington, DC - On the first day, the committee will hear from analysts who have examined NHTSA's consumer complaint reports as well as experts on electromagnetic magnetic interference and electronic data recorders. On the second day, NHTSA will describe its databases and analytic capabilities on incidents, consumer complaints, and early warning data. The committee will also hear from safety advocates and individuals who have experienced unintended acceleration.

Posted 09/22/2010 - September 13-14 Committee Meeting**September 13, 2010** - Speakers' Presentations

- Todd Hubing, Michelin Professor of Vehicle Electronic Systems Integration, Clemson University International Center for Automotive Research - "[Potential Electronic Causes of Unintended Acceleration](#)"
- Roger Saul, Director, and Frank Barickman, Electronics Engineer, National Highway Traffic Safety Administration - "[Description of the Vehicle Research and Test Center](#)"

Posted 08/10/2010 - September 13-14 Committee Meeting - The Committee will meet—primarily in proprietary session—with auto manufacturers and suppliers to discuss their safety assurance processes and capabilities related to vehicle electronics and electronic controls.

Posted 08/10/2010 - August 2-3 Committee Meeting - The Committee met—primarily in proprietary session—with Daimler Benz and General Motors officials to discuss their safety assurance processes and capabilities related to vehicle electronics and electronic controls. The committee also discussed plans to meet with additional auto manufacturers and suppliers at its September 13-14 meeting.

Posted 07/01/2010 - June 30 and July 1 Committee Meeting - Speakers' PowerPoints or Notes**June 30, 2010**, NHTSA Informational Briefing: "Study of Electronic Vehicle Controls and Unintended Accelerations"

- [All Presenters' 128 Slides](#)
- [Photos from the day's meeting](#)
- Daniel C. Smith, Associate Administrator, Enforcement - "[Overview of NHTSA and its Activities Related to Unintended Acceleration and Vehicle Electronics](#)"
- Richard Boyd, Acting Director, Office of Defects Investigation - "[Known Vehicle Causes of Unintended Acceleration](#)"
- Roger Saul, NHTSA Vehicle Research and Test Center - "[Possible Electronic Causes](#)"
- Mike Kirsch, NASA Engineering Safety Center - "[Assessment of ETC System \(NASA support to NHTSA\)](#)"
- Roger Saul, NHTSA Vehicle Research and Test Center - "[Final Points: Toyota Electronic Throttle Control \(ETC\) Study](#)"
- Richard Compton, Director, Office of Behavioral Safety Research - "[Human Factors Considerations: Unintended Acceleration & Pedal Errors](#)"
- Nat Beuse, Crash Avoidance Standards Rulemaking - "[Government and Voluntary Standards as They Relate to Unintended Acceleration](#)"
- John Maddox, Associate Administrator, Vehicle Safety Research - "[Research Activities Related to Electronics](#)"
- John Maddox, Associate Administrator, Vehicle Safety Research - "[Wrap-up and Recommendations](#)"

July 1, 2010, Presentations or Speaker's Notes

- Rob Strassburger, Vice President, Vehicle Safety & Harmonization, Alliance of Automobile Manufacturers - "Industry Perspectives on UA and Electronic Controls" ([Speaker's Notes](#) and [PowerPoints](#))
- Todd Hubing, Michelin Professor of Vehicle Electronic Systems Integration, Clemson University International Center for Automotive Research - "[Analyzing Unintended Acceleration and Electronic Controls](#)"

Posted 06/09/2010 - June 30 - July 1, 2010, [meeting details and agenda](#) are available.